

REMARKS

The present application includes claims 1-20 and 22-25. Claim 21 has been withdrawn. Claims 1-20 and 22-25 have been rejected by the Examiner. By this response, claims 1, 11, 20 and 22 have been amended.

The Applicant thanks the Examiner for his time on February 8, 2007, in meeting with the Applicant's attorney, Chris George, to discuss the pending claims of the present application and cited art. In view of the discussion, the Applicant makes the following amendments.

Claim 1 has been amended to recite that function commands are generated based on a system configuration file including information regarding a number of subsystems in the system and levels within each of the at least one function which each of the subsystems participate. Additionally, claim 1 has been amended to recite that task instructions are provided based on a subsystem configuration file including a number of task operators in the subsystem and levels of operation within each of the at least one function in which the subsystem and the task operators participate.

Claim 11 has been amended to recite that a function command is transmitted based on a configuration file including information regarding a number of subsystems in the system and levels within at least one function in which each of the subsystems participate, and the function command is relayed to a task operator based on the configuration, wherein the configuration file specifies levels within each of the at least one function in which the task operator participate.

Claim 20 has been amended to recite that control of a medical diagnostic imaging system is distributed among a plurality of hierarchical levels based on at least one configuration file

including information regarding a number of secondary levels in the plurality of hierarchical levels and levels for execution of the system commands.

Additionally, in claim 22, system commands are transmitted from the top level to the plurality of secondary levels based on the at least one configuration file including information regarding a number of medical diagnostic imaging subsystems in the system and state transitions in which each of the at least one medical diagnostic imaging subsystem participate.

Thus, the Applicant respectfully submits that the pending claims as amended recite patentable subject matter and should be allowed.

Claims 1-6 and 22-23 were rejected under 35 U.S.C. 103(a) as being unpatentable over Hershey et al. (U.S. Patent No. 6,175,934) in view of the GE article (From InSite to OnSite: Leveraging Technology for Rapid Service Growth).

The Applicant respectfully submits that a combination of Hershey and the GE article does not teach or suggest all of the limitations recited in claims 1-6 and 22-23.

The GE article mentions remote diagnostics to access data available on customer equipment. See, e.g., page 1. Hershey relates to a satellite-based system for remote monitoring test equipment. Abstract. Hershey allows specialized tests to be conducted on the equipment to aid in predictive maintenance. Abstract. Geo-synchronous based satellites enable a remote diagnostic unit, which is coupled to an apparatus under test, to communicate with a remote diagnostic station regardless of geographic location. Col. 1, ln. 66 – col. 2, ln. 22.

Neither the GE article nor Hershey, taken alone or in combination, teach or fairly suggest that function commands are generated based on a system configuration file including information regarding a number of subsystems in the system and levels within each of the at least one

function which each of the subsystems participate. Additionally, neither the GE article nor Hershey, taken alone or in combination, teaches or fairly suggests that task instructions are provided based on a subsystem configuration file including a number of task operators in the subsystem and levels of operation within each of the at least one function in which the subsystem and the task operators participate. These limitations are recited in amended claim 1.

Furthermore, neither reference discloses a system manager, a subsystem, a subsystem manager and at least one task operator, as recited in claim 1. Additionally, neither reference discloses that the system manager generating function commands and the subsystem manager providing task instructions in response to the function commands, as recited in claim 1. Also, neither reference teaches or suggests that the system manager generates, based on the system configuration file, function commands, and the subsystem manager provides, based on the subsystem configuration file, task instructions in response to the received function commands.

Thus, any combination of the Hershey and GE references would fail to teach or fairly suggest the limitations of claim 1 and the limitations of dependent claims 2-10.

Additionally, neither Hershey nor the GE article teaches or suggests, as recited in amended claim 22, that system commands are transmitted from the top level to the plurality of secondary levels based on the at least one configuration file including information regarding a number of medical diagnostic imaging subsystems in the system and state transitions in which each of the at least one medical diagnostic imaging subsystem participate.

Furthermore, the GE article does not discuss states or desired states of a medical diagnostic imaging subsystem. Nor does the GE article discuss initiating transition to a desired state and monitoring and coordinating the transition of the subsystem in order to synchronize the

medical diagnostic imaging system at the desired state (i.e., an operational state of a state machine, such as boot, shutdown, power failure, and error handling, for example). Hershey also does not teach or suggest such a series of steps. Additionally, Hershey does not teach or suggest monitoring and coordinating the transition of the at least one medical diagnostic imaging subsystem to the desired state in order to synchronize the medical diagnostic imaging system at the desired state. Rather, Hershey directs a machine under test to execute a self diagnostic test and then provide data to a central diagnostic station. Col. 5, ln. 29 – col. 6, ln. 15.

Therefore, neither Hershey nor the GE article, taken alone or in combination, teaches or suggests the limitations of claims 22-23 of the present application.

Next, claims 7 and 8 were rejected under 35 U.S.C. 103(a) as being unpatentable over Hershey in view of the GE article and further in view of Havekost et al. (U.S. Patent No. 6,871,299). As described above, neither Hershey nor the GE article teaches or suggests the limitations of independent claim 1, from which claims 7 and 8 depend. Additionally, neither Hershey nor the GE article discloses a task operator or data indicative of a level or a phase in a function at which a failure occurs, let alone a task operator generating data indicative of a level (claim 7) or a phase (claim 8) in a function at which the failure occurred. The disclosure of Havekost does nothing to cure these defects. Havekost has no disclosure of states including one or more levels and levels including one or more phases, for example.

Therefore, any combination of Hershey, Havekost, and the GE article fails to teach or suggest the limitations of claims 7-8 of the present application.

Claims 9 and 10 were rejected under 35 U.S.C. 103(a) as being unpatentable over Hershey in view of the GE article and further in view of Turek et al. (U.S. Patent No. 6,460,070). As discussed above, neither Hershey nor the GE article, taken alone or in combination, teaches or suggests the limitations of claim 1, from which claims 9 and 10 depend. Neither Hershey nor the GE article also discloses the further limitations of claims 9 and 10. Turek relates to a distributed enterprise including computing resources organized into managed regions servicing one or more gateway machines servicing a plurality of endpoint machines. Abstract. In Turek, a selected software agent is deployed into the computer network to diagnose a fault in the environment. Abstract and col. 2, ll. 47-49. The software agent identifies the cause of the fault, then the agent undertakes a corrective or other action. Col. 2, ll. 40-62. Turek fails to cure the deficiencies of Hershey and the GE article with respect to the limitations of independent claim 1 and its dependent claims 9-10.

Therefore, none of Hershey, Turek or the GE article, taken alone or in combination, teaches or suggests the limitations of claims 9 and 10 of the present application.

Claim 11-20 was rejected under 35 U.S.C. 103(a) as being unpatentable over Turek in view of the GE article. While Turek diagnoses faults in a large, distributed computer network, Turek does not relate to a medical diagnostic imaging system, and Turek does not use at least one configuration file to distribute control and transmit system commands in a hierarchical environment.

As amended, claim 11 recites, among other things, that a function command is transmitted based on a configuration file including information regarding a number of subsystems in the system and levels within at least one function in which each of the subsystems

participate. The function command is relayed to a task operator based on the configuration, wherein the configuration file specifies levels within each of the at least one function in which the task operator participate. The Turek reference teaches none of these limitations. The Turek reference also fails to suggest such limitations. As discussed above, the GE article does not cure these defects. Therefore, the Applicant respectfully submits that neither reference, taken alone or in combination, teaches or suggests all the limitations of claims 11-19, and these claims should be allowable.

Additionally, claim 20, as amended, recites that control of a medical diagnostic imaging system is distributed among a plurality of hierarchical levels based on at least one configuration file including information regarding a number of secondary levels in the plurality of hierarchical levels and levels for execution of the system commands. Neither the Turek nor the GE article teaches or suggests these limitations, as well as the remaining limitations of claim 20 of the present application. Therefore, the Applicant respectfully submits that neither Turek nor the GE article, taken alone or in combination, teaches or suggests the limitations of claim 20, which should be in condition for allowance.

Finally, claims 24 and 25 were rejected under 35 U.S.C. 103(a) as being unpatentable over Hershey in view of the GE article and further in view of Mori et al. (U.S. Patent No. 4,627,055). As discussed above, neither Hershey nor the GE article, taken alone or in combination, teaches or suggests the limitations of independent claim 22, from which claims 24 and 25 depend. Neither Hershey nor the GE article teaches or suggests synchronizing a plurality of medical diagnostic imaging subsystems at a desired state. Additionally, neither Hershey nor

the GE article teaches or suggests generating an error signal with one of the plurality of medical diagnostic imaging subsystems does not transition to a desired state. Mori, which relates to a decentralized system wherein subsystems diagnose failure and conduct suitable fault time processing, does nothing to cure these defects. Abstract. Mori does not relate to a medical diagnostic imaging system or subsystem. Additionally, timing, but not states, is synchronized in Mori. Col. 2, ll. 43-66.

Therefore, the Applicant respectfully submits that none of Hershey, Mori or the GE article, taken alone or in combination, teaches or suggests the limitations of claims 24 and 25.

CONCLUSION

It is submitted that the present application is in condition for allowance and a Notice of Allowability is respectfully solicited. If the Examiner has any questions or the Applicant can be of any assistance, the Examiner is invited and encouraged to contact the Applicant at the number below.

The Commissioner is authorized to charge any necessary fees or credit any overpayment to the Deposit Account of GTC, Account No. 070845.

Respectfully submitted,

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